

AYURVEDIC APPROACH TO THE PREVENTION AND MANAGEMENT OF LIFESTYLE DISORDERS

SUDHARMA. I. KODITUWAKKU¹ & SATYAPAL SINGH²

¹M.D. Scholar, Department of Kayachikitsa, Faculty of Ayurveda, Institute of Medical Sciences,
Banaras Hindu University, Varanasi, Uttar Pradesh, India

²Research Scholar, Department of Kayachikitsa, Faculty of Ayurveda, Institute of Medical Sciences,
Banaras Hindu University, Varanasi, Uttar Pradesh, India

ABSTRACT

A particular lifestyle of person is a cumulative product of his/her physical capacity coordinated with psychological functioning displayed in the form of habits, behaviors, dietary and living pattern based on his own training sought from childhood and also gained from his immediate companions including parents, siblings, peers etc. Lifestyle disorders are primarily resulted due to the faulty daily habits like smoking, alcohol consumption, day sleep, fat and sugar rich diet, late night sleep etc. and an inappropriate relationship of people with their environment. An association between such faulty life style and Lifestyle disorders was reviewed from different Ayurvedic classics. The subject material has reviewed from different related journals and also searched on internet. Lifestyle disorders are non-infectious and non-transmissible, but are likely to continue progressively unless intervened.

Ayurveda offers several strategies/measures related to lifestyle which include Dinacharya (daily regimen as per the daily biological clock), Ritucharya (seasonal regimen), Daivavyapashraya Chikitsa (divine/spiritual therapy), Satvavajaya Chikitsa (psycho-behavioral therapy), regular Panchakarma (regular internal bio-purification with five principal measures), Rasayana (rejuvenative measures), Sadvrata (ideal routines) and Achara Rasayana (code of good conducts) and Ahara Vishayak Vihara (dietary patterns and discipline of eating). These measures help to modify lifestyle, promote psychosomatic health, reduce psychosocial stress and thus help in prevention and management of a wide range of lifestyle disorders and therefore, ultimately serve as measures for maintaining overall well being and for better living. In this way, the present review article has discussed the different regimens/measures regarding diet and lifestyle modification as mentioned in the Ayurvedic classics and their impact on lifestyle disorders.

KEYWORDS: Dietary Patterns, Discipline of Eating, Lifestyle, Lifestyle Disorders, Psycho-Social Stress, Rasayana

INTRODUCTION

Ayurveda is one of the oldest systems of medicine which perceived the intimate relationship of an individual lifestyle to its health and disease. It is amazing that the Ayurveda conceived the importance of the lifestyle in the promotion of psychosomatic health thousands of years ago which now is considered the principal cause of many disorders prevalent today.

Definition of health as per the Ayurveda includes the physical, physiological, psychological and spiritual wellbeing of an individual [1]. Not surprisingly the concept of health propounded by WHO in the modern era is in close

approximation with the concept of health defined in Ayurveda.

According to WHO, lifestyle diseases may be chronic diseases of long duration and slow progression or they may result in more rapid death. Diet and lifestyle are the major factors found to influence susceptibility to many diseases. A faulty life style is proved to work at multiple levels to influence susceptibility to many diseases. Lifestyle diseases better known as non-communicable diseases or diseases of civilization and characterize those diseases whose occurrence is primarily based on the daily habits of people and also resulted due to an inappropriate relationship of people with their environment.

Ayurveda emphasize more on Ahara (diet/dietary supplementation) and Vihara (lifestyle/lifestyle modification) for the promotion of positive health and prevention from a wide range of disorders. Ahara and Vihara play a central role in Ayurvedic living. As per the view point of Ayurveda lifestyle disorders are those resulted from faulty Ahara and Vihara including discipline of eating. Modified from [2].

It is now considered that most of the chronic disorders like diabetes mellitus, bronchial asthma, hypertension, coronary artery diseases, COPD (chronic obstructive pulmonary diseases), obesity, chronic liver diseases, psoriasis, arthritis, etc. are resulted due to faulty lifestyle. Therefore, the lifestyle modification is considered sheet anchor for the prevention and management of such type of disorders. Ayurveda offers a wide variety of dietary supplementation and a range of non-pharmacological measures for prevention and management of lifestyle disorders. There is a great need of time to globalize dietary supplementation and non-pharmacological measures as described in Ayurvedic system of medicine to promote the psychosomatic health, to reduce the morbidity and to reduce the disease burden on the society.

Prevention and Management of Lifestyle Disorders in Ayurveda

There is a paucity of epidemiological data on the overall prevalence of lifestyle disorders in India because of the country is huge with very diverse population that has different social and cultural characteristics, even today, there is inadequate access to healthcare institutions for many rural communities, urbanization of lifestyle since the urban people are having less physically active life-style, more exposure to products and technologies that could be unhealthy for them and psychosocial stress arises due to unemployment. Modified from [3,4].

The Indian military has a fairly good representation of all communities and population subgroups of the country and hence a study on the health of military person would reflect the overall health status of young adult population of India. Military person of a country are expected to be healthier than its native population because these individuals usually lead healthy lifestyles that include regular exercise and good nutrition, have easy access to healthcare, and are younger than the general population. However, Ray et al in their study found a high prevalence of pre-hypertension (79.8%), lipid abnormalities (about 67%) and overweight/obesity (29.9%) among Indian military subjects which should be an eye opener to the alarmingly high rates of prevalence of lifestyle diseases in India that demands urgent action [5].

Ayurvedic system of medicine offers holistic approach towards prevention and management of diseases. Ayurvedic intervention is targeted towards complete physical, psychological and spiritual wellbeing, which makes it a wonderful option in treating lifestyle disorders. Ayurveda provides great options in the form of proper dietary management, lifestyle advises, measures for internal bio-purification and rejuvenation.

Lifestyle medicine is defined as the application of environmental, behavioral, medical and motivational principles to the management of lifestyle-related health problems in a clinical setting [6]. A healthy lifestyle which includes a proper

balanced diet, physical activity and giving due respect to biological clock must be adopted to combat these diseases. Ayurveda described Dinacharya (daily regimen) and Ritucharya (seasonal regimen) which include dietary and lifestyle modification for an individual depending on his Prakriti (psychosomatic constitution) to maintain the biological clock. Each individual is recommended to follow specific diet & activities based on his/her Prakriti, as the Prakriti is major determinant factor for predisposition of diseases, management as well as life-style modification or recommendation to a large extent.

The Ayurveda described various measures/strategies for Management of lifestyle disorders which are very important to maintain a healthy and happy psychological perspective include

- Ahara (Diet/dietary supplementation)
- Daivavyapashraya Chikitsa (divine/spiritual therapy)
- Satvavajaya Chikitsa (psycho-behavioral therapy)
- DinAcharaya (daily regimen)
- Ritucharya (seasonal regimen)
- Panchakarma (five technologies of internal bio-purification)
- Rasayana (rejuvenative measures)
- The Sadvratta (ideal routines)
- Achara Rasayana (code of good conducts)

Ahara

Ahara and Vihara play a central role in the life according to Ayurvedic understanding. Ayurveda places special emphasis on Ahara and Vihara as measures for better living, health and wellness. Ayurveda emphasizes more on Ahara in comparison to other systems of medicine and also explored its emotional and spiritual significance, in addition to its material and biological attributes. Ahara is considered as Prana (basis of life) in Ayurveda [7]. Ahara has described as one of the Trayopastambha (three subsidiary pillars) of life which are Ahara, Nidra (sleep) and Brahmacharaya (celibacy) [8]. Diet is considered as vital for a human body as it provides the basic nutrients and promotes longevity. Ayurveda always emphasizes on consuming healthy and nutritious diet for maintaining good health.

As per the view point of Ayurveda, both the living human body and the diseases afflicting it are the products of Ahara. Use of Hita Ahara (wholesome diet) promotes health and longevity and Ahita Ahara (unwholesome diet) promotes manifestation of different disorders. Unfortunately in modern era the concept of Hita Ahara is continuously being ignored leading to the emergence of lifestyle disorders [9]. Ayurveda also described eighteen types of dietary incompatibilities (Viruddha Ahara) [10], which should be avoided to maintain health and longevity. In this way Ayurveda offers different Pathayapathya (do's & don'ts) regarding diet/dietary supplementations which definitely help in the prevention and management of a wide range of lifestyle disorders.

Daivavyapashraya Chikitsa

Daivavyapashraya Chikitsa include chanting Mantras, Aushadhi and Mani Dharana (spiritual use of herbs and

gems), Mangal Karma (propitiatory), Bali (offering oblations), Homa, Prayashchita (ceremonial penances), Upavasa (fasting), Swastyayana (rituals for social well being) etc. All these rituals activities directly or indirectly exert a positive impact on mind (Manas), promote psychosomatic health; impede the psychosocial stress and leads to reduction & abolition of negative thoughts like suicidal ideations etc. Some 90% of the world's population engaged in religious or spiritual practices. These practices are major means of coping with stress and for prevention and management of lifestyle disorders [11].

Sattvavajaya Chikitsa

The author of foremost classic on internal medicine, Charaka Samhita defines it as 'Sattvavajaya Punah Ahitebhyo Arthebhyo Manognigrah'. Means a method of restraining or withdrawal of the mind from unwholesome objects (Arthas). Thus, the term Sattvavajaya implies to that modality which is therapeutic for mental or emotional stresses and disturbances. This is secured best by restraining the mind from desire for unwholesome objects. All these measures help in developing control over the Manas or mind, which is usually unstable [12].

Dincharya

Normal circadian rhythms are very important in day to day life to maintain biological clock. Ayurveda suggests to begin daily habits with awareness, early rising, avoid suppression of natural urges and eliminate wastes as per urge, keep the teeth & skin cleaned, regular use of massage (Abhyanga), regular daily bathing (bathing enhances the appetite and promotes longevity), consume suitable and wholesome diet according to the appetite and metabolic needs, since it is the basis of life and important for day to day promotion of health. Ayurveda has also suggested to avoid late night sleep, eating stale foods, having sex with inappropriate partner & at unsuitable time and position and the misuse of senses. These might lead to imbalance in the circadian rhythms and thus long term imbalance predisposes to lifestyle disorders. Therefore, one has to stay aware about this daily regimen for day to day promotion of health, boost immunity and prevention from lifestyle disorders. Modified from [13].

Ritucharya

Ritu (season) classified by different features expresses different effects on the body as well as on the environment. Ayurveda has depicted various rules and regimens (Charya), regarding diet and lifestyle to acclimatize seasonal enforcement easily without altering body homeostasis. The prime objective of Ayurvedic system of medicine is preventive aspect, which can be achieved by the modification in diet and lifestyle in response to change in climatic condition. Ritucharya represents a very important aspect of preventive measure for various illnesses including lifestyle disorders as mentioned in Ayurvedic texts [14].

It is the only system of medicine in the world which proposes the need of regular purification of the human biological system from gross level to the molecular level to render it suitable for self recovery and therapeutic responsiveness. The human biological system continuously undergoes wear and tear and needs to be cleansed and rejuvenated regularly. Therefore, Ayurveda advises seasonal Panchakarma as preventive measure for maintenance and promotion of physical as well as mental health.

Panchakarma

Panchakarma is a collective term used to address the five principal procedures or technologies of bio-purification.

These procedures are used in order to cleanse the body channels, to eliminate toxins out of the body, brings about the harmony of bio-humors (Tridosha i.e. Vata, Pitta, Kapha, and Manasa Dosha i.e. Raja and Tama) to obtain long-lasting beneficial effects which further leads to chemical balance inside the bio-system and thus provide the normal chemical and electrical environment in brain and ultimately restore the homeostasis. When done properly, these promote psychosomatic health, rejuvenate the body and increase the receptivity and effectiveness of subsequent therapies. The five technologies of Panchakarma include Vaman (therapeutic emesis), Virechan (therapeutic purgation), Asthapan Basti (therapeutic decoction enema), Anuvasana Basti (therapeutic oil enema) and Nasya Karma (nasal medication) [15].

Ayurveda emphasizes more on the preventive aspect of the Panchakarma rather than curative. It also facilitates the absorption of nutrient and drugs administered thereafter in favor to attain their desired pharmaco-therapeutic effects. Panchakarma also restore the mental health, reduces the stress and therefore, help in the prevention as well as management of many lifestyle disorders. Panchakarma is claimed for its preventive, promotive, prophylactic and rejuvenative properties [16].

Rasayana

In addition to food and diet, Ayurveda propounds a separate concept of medicinal dietary supplements in the context of Rasayana (rejuvenative measures). Rasayanas can be used as nutritional supplement as well as medicine depending upon its various types.

Most Rasayanas produce their nourishing and rejuvenating effect by promoting the Agni Bala, acting as direct nutrients and by way of Sroto-prasadan (purification of body channels), resulting in an improved nutritional status which further leads to an improved quality of Dhatus or body tissues. Although the Rasayanas are a generic class of restorative and rejuvenative supplements, many Rasayanas could be tissue and organ specific such as Medhya Rasayana for the brain, Hridya Rasayana for the heart, Twachya Rasayana for the skin, and so on [17]. Various studies on Rasayana drugs suggest their following action [18].

- Immunomodulator
- Adaptogenic
- Antioxidant
- Nootropic
- Antistress

Sadvratta and Achara Rasayana

Ayurveda offers some code of good conducts under the heading of Sadvratta and Achara Rasayana. The conducts under Sadvratta and Achara Rasayana can be categorizes into personal (viz. limited sexual relations, early sleeping and awakening, avoid excess exertion, avoid suppression of natural urges, regime of bathing, keeping skin clean), social (keep mercy on others, telling truth, avoid alcoholism, be soft hearted, always use cleaned and washed cloths), psychological and emotional (try to be in a steady mental state i.e. avoid height of emotions, try to avoid to memorize if being insulted by anyone, keep patience, etc). Such type of lifestyle adaptation always helpful in the prevention and management of a wide range of lifestyle disorders [19].

Social inclusion is a protective factor for maintaining mental health. Social networks and supports contribute to one's sense of purpose, self-esteem, resilience and access to resources and information. Furthermore, community participation and civic engagement are associated with better self-reported mental health.

The major component for the management of lifestyle disorders is Ahara and Vihara like healthy and antioxidant diet especially enriched with Rasayanas depending upon the patient's Prakriti and type of lifestyle disorder and adequate physical activity. Dietary practices of different population subgroups in India are very diverse and processed food is consumed only by a minority of the population. Major chunk of Indians cook most of their food at home and ingredients of foodstuffs are decided by themselves. Therefore, dietary modification including ingredients of foodstuffs is easy for such types of patients/individuals.

DISCUSSIONS

From stone age to space age living pattern of people has undergone numerous changes and countries become more industrialized. In present era most of the disorders are resulted due to improper life style. Life style disorders are resulted due to an inappropriate relationship of people with their environment. Therefore, according to Ayurvedic system of medicine, a proper diurnal and seasonal behavior is very important for preventing diseases, harmonizing the biological humors and re-equilibrating the energy cycle in the body.

Lifestyle has changed from being an indicator of the overall well being of an individual to a cause of disease and now lifestyle has itself become an object of medical attention and thus the cause of concern. Due to urbanization and adapting western culture in India the lifestyle has been disturbed like low activity level, sedentary lifestyle, etc. which contributes significantly to the risk of developing the metabolic syndrome and other lifestyle related disorders. Therefore, by adapting the principles of Ayurveda for diet and lifestyle modification we can impede lifestyle disorders [20].

The etiology of disorders fundamentally lie in the environment and lifestyle of an individual, hence the promotion of health and prevention of disease too should lie upon their correction and management. It is in this perspective the Ayurvedic system of medicine offers several measures for prevention and management of lifestyle disorders. In order to live a healthy and active life, a sound mind in the sound body is very essential and all these measures of Ayurveda promote physical as well as mental health.

Ayurveda emphasizes the material quality of food but places even greater emphasis on the selection of food, it's processing and cooking and rules for healthy eating. Thus, the Ayurvedic approach to food and dietetics is very different from the conventional western approach. Wholesome diet leads to improved nutrition which in turn promotes longevity, decelerates aging, enhances immunity or leads to immunomodulation to impede various disorders, improves intelligence, augments memory and promotes overall enhancement of mental competence, increases vitality and luster of the body. The ritual of eating and the company in which a person eats also influences his health and well-being.

Ayurvedic treatment involving medicines, diet and lifestyle activities which restore the Doshic/functional balance shows how a textual theory has been translated into a successful and viable clinical practice. Ayurvedic principles and methods of healthy living can be incorporated easily into people's daily life, their cuisine and other day to day activities. It can thus have a pervasive influence on the daily life of people by providing optimal health by customizing and harmonizing diet and lifestyle activities. This way, people are made responsible for their health and they need not to consider themselves as victims of factors beyond their control. Modified from [21].

The principles and practice of Rasayana in Ayurveda is most probably based on the principle of immunomodulation. Rasayanas as described in Ayurveda nourish the body, boost immunity and help to keep the body and mind in the best of its health. It is a multi-angled approach, taking care of body, mind and spirit, thus affecting total wellbeing of an individual [22].

Adaptation according to the changes is the key for survival, thus the knowledge of Ritucharya (seasonal regimen/regimen for seasonal variations) is very important. Pathyapathya (do's and don'ts regarding diet and lifestyle) is an important component of every prescription in Ayurvedic clinical practice. Sometimes, dietary management and or lifestyle modification in itself is a complete treatment. Ayurvedic dietetics is concerned primarily with the energetics of food as a mean of balancing the biological humors.

Encouragement of healthy lifestyles in the population promotes psychosomatic health, help to reduce the high burden of lifestyle diseases and also prevent from a wide range of disorders. Social communities, Governmental and non-governmental agencies of the country should work together to achieve this goal. Lifestyle interventions have shown definite benefit in the prevention and management of these diseases in large scale studies [23,24].

The bad-habit triad of smoking, excess alcohol intake and overeating seems to be risk factor for a wide range of lifestyle disorders. Satvavajaya Chikitsa is very helpful in such type of patients to modify their lifestyle. It is a method of restraining or withdrawal of the mind from unwholesome objects.

Panchakarma presents a unique preventive as well as therapeutic approach in Ayurvedic system of medicine with specially designed five procedures used for internal bio-purification of body. Panchakarma has given a special place in all ancient Ayurvedic texts. Acharaya Charak has described a wide use of Panchakarma therapy in a wide range of disorders. Panchakarma promotes psychosomatic health, rejuvenates body and mind and thus help in prevention and management of various lifestyle related disorders.

The whole range of Daivavyashraya Chikitsa, Satvavajaya, Dincharya, Ritucharya, Sadvratta, Achara Rasayana and other non-pharmacological Rasayana described in the Ayurvedic classics is designed to foster a healthy life style for better living to everyone as a promotive and preventive health care and also for the management of a diseased individual. Normal circadian rhythms (daily and seasonal) are very important in day to day life for promotion of positive health. Sadvratta and Achara Rasayana include not only mental faculties but also discipline related with general hygiene, ritual activities, food consumption, sexual relation and exercise. Application of this positive lifestyle will definitely help in prevention and management of various lifestyle disorders.

Lifestyle disorders are very common in the present era due to unawareness towards and or ignoring proper daily regimen, seasonal regimen and good code of conducts. The field for the therapeutic application of Ahara and Vihara as described in Ayurveda is very vast & more scientific and needed their further validation in the management of wide range of disorders including lifestyle disorders as per the need of present era.

CONCLUSIONS

In present era, hurry, worry, curry and continuous exposure to psychosocial stress lead to compromised or an unhealthy life style. An unhealthy life style leads to Agni-Bala Vaishmya (impaired digestion and metabolism), Oja-Bala Dosha (immune dysregulation) and Srotodushti (dysregulation of body channels), which in turn lead to a variety of

lifestyle disorders. Ayurveda provides great options in the form of dietary modification, Dinacharya, Ritucharya, Satvavajaya Chikitsa, Sadvratta and pharmacological and non-pharmacological Rasayana for prevention and management of lifestyle disorders. Pathyapathya (do's and don'ts regarding diet and lifestyle) is an important component of every prescription in Ayurvedic clinical practice. Sometimes, lifestyle modification in it-self is a complete treatment. Ayurvedic lifestyles are concerned primarily with way for better living. Ayurveda, therefore, goes beyond treating diseases and is a healthcare system teaching one how to be healthy by facilitating harmonious diet and activities.

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